1812

1935

Economic Conditions
Governmental Finance
United States Securities

New York, December, 1935

General Business Conditions

THE increase in automobile sales and production has been the feature of the business news during November. The public response to the policy of introducing new models in the Fall has been all that the industry hoped for, and sales made at the shows held during the month are reported 30 to 60 per cent greater than at the shows last January. Since the chief uncertainty in the new policy concerned the willingness of the public to buy cars so late in the season, the good sales figures seem to establish its success. They have stimulated production above expectations in November, and have led in some cases to upward revisions of factory schedules for December also. In the past week or two, assemblies have reached a level only about 15 per cent below the peak of last April. It is likely that the November total will be at least 350,000, compared with preliminary estimates of 300,000, and December will show little if any falling off. The corresponding figures one year ago were 83,000 and 154,000.

October assemblies also exceeded expectations, with a total of 275,000 cars and trucks in the United States. The total for ten months was 3,204,000, and another 700,000 in the two closing months will make the 1935 total 3,900,000, whereas the general expectation at the beginning of the year was about 3,250,000.

It is probable, of course, that some of the sales this Fall will be at the expense of January and February, for the usual inducement of new models will then be lacking and seasonal conditions will be at their worst. Also, dealers will be well stocked earlier than usual. The possibility that this may lead to a slackening in assemblies in January is recognized. However, the object of the new policy is to smooth production and employment, leveling both the Winter decline and the Spring expansion, and within the limitation of the ability of dealers to carry stocks it is certain that producers will strive for that goal. Also, the industry is optimistic as to the 1936 outlook. Its leaders are on record as expecting that the national income will show a further increase, and that automobiles will get a full share of it, by reason of the obsolescence and high average age of the cars in use and the huge replacement demand that has accumulated. The opinion that there will be a demand for well over 4,000,000 cars is general.

Business Indexes Up

All business has been helped by this automobile activity. It goes without saying that industrial production is still rising, as it has been since early Summer. The Federal Reserve Board's index, adjusted to allow for the usual Fall rise, improved from 85 in May to 94 in October (1923-25 = 100). Evidently November indexes will show a further rise when final figures are available.

Automobile operations are by no means the only factor in the upward trend, though clearly they are the dominant one. Steel mill operations have advanced strongly, and in the last week of the month reached a new high for the year, at 55.4 per cent of capacity, according to the Iron and Steel Institute. As a rule steel production drops slightly in November, but the automobile situation makes this year an exception. Also the tin plate division has had a Fall expansion, miscellaneous demands are holding up strongly, and there is enough possibility of a price advance in finished steel to induce consumers to buy ahead.

Electric power consumption has broken all records during the month. Railway traffic has declined, but the drop is seasonal in character. Cotton mill operations have expanded, and textile production as a whole is maintained at its previous high level, save for seasonal recession in certain branches.

With the major industries taking this course, the indexes indicate that the actual volume of industrial production is the greatest since recovery began, or since the Spring of 1930; while on a seasonally adjusted basis only the month of July, 1933, was more active.

These figures fulfill the optimistic expectations with which business men entered the Fall. Employment is the highest since October, 1930, and payrolls are the highest since March, 1931; the farmer has been buying as expected; and with Government expenditures supplying purchasing power to those who have none of their own, trade on the whole has been good. The Eastern states have been an exception, due to the effect of unseasonably warm weather on apparel sales. New York City department stores had smaller sales than a year ago both in October and the first half of November; and the decline was largely in seasonal items. These stores have considerably larger stocks of apparel on hand than last year. However, the drop in temperatures toward the end of the month improved the situation, and better figures are looked for hereafter.

In the West and South retail trade has continued favorable. One of the big mail order houses had the largest sales in its history in October, and the other the largest since 1929. Department store sales for the month, for the whole country, were 6 per cent over last year, and the sales of 24 chain store systems 8 per cent larger.

It is significant that retail reports as a rule note a broadening of demand into a wider range of merchandise, also more call for higher priced goods. Production figures show that the gains have extended to such lines as refrigerators, washing machines, electrical apparatus, pianos, furniture, farm and garden equipment, oil burners, stokers, office equipment, and similar durable goods. In all these lines, as in automobiles, business is the best in four or five years, and in the newer types of goods it is the best on record.

In the month of October farm income from marketings, as estimated by the Department of Agriculture, increased to $793,000,000, the highest since October, 1930. Benefit payments totaled $58,000,000, making a grand total of $851,000,000, the highest since the Fall of 1929. This is sufficient explanation of the steady gain in farm implement sales and in general business in the farm States.

In the Capital Goods Industries

Of course retail trade in consumer goods is only a part of business, and not the most important part, since the greatest decline of production in time of depression is not in goods purchased by individuals, but in those purchased by the industries. The best improvement in capital goods has been in motor trucks and industrial machinery. Machine tool orders showed a good recovery in October from their September slump, increasing 23 per cent, which brings the index 134.4 per cent above a year ago. Orders have continued good in November also. There is no reason to doubt that the replacement and modernization of industrial equipment is fairly under way, and the endless need to reduce costs will keep the movement going.

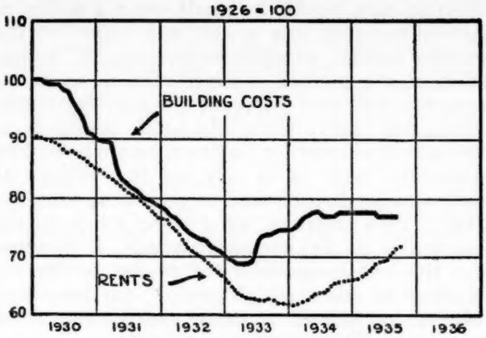
There is evidence of a little more railway buying of steel and other equipment, accompanying the earnings improvement in October, which was the best month for the roads since October, 1930. Undoubtedly if the railroads should have a 10 per cent improvement in traffic in 1936 they would need considerable new equipment, also they would have more money to buy it with. Meanwhile their purchases are likely to continue limited. The public utility companies are more fortunate in that they are experiencing a record demand for their products, but under conditions which do not invite expansion of capacity. The future of public policies affecting them is uncertain, and their facilities are not yet overburdened. Thus they are unlikely to give much support to the equipment industries.

Building Gains

In the building industry definite gains are still being made. Contracts awarded during October were 48 per cent over last year, and during the first half of November they were 56 per cent larger. Private enterprise is responsible for a good half of current construction and is in the greatest volume in four years. In fact the entire increase in building contracts awarded, this year over last, will be in privately owned construction, public awards being almost unchanged.

Undoubtedly there has been a change for the better in the fundamental conditions affecting construction activity. Residential building is depressed when it is cheaper to rent or buy than build. When the general business recovery began in 1933 building costs rose while rents stayed down, and building lagged in the recovery movement. However, improvement in the relation of rents to costs is now apparent. The National Industrial Conference Board compiles an index of residential rents in 173 cities, which shows that the low point was established nearly two years ago. There has since been an increase of about 15 per cent. Meanwhile building costs have been almost stationary, and the gap between the two has therefore closed somewhat. The chart on the next page gives the Conference Board index of rents since 1930, together with the American Appraisal Co. index of construction costs, both upon the base 1926 = 100. The widening of the gap in 1933 is plain, and also the present tendency for the lines to come together.

This is a favorable background for home building. Undoubtedly there are accumulated needs for housing, just as for everything else that people have gone without during the depression. Government surveys in 257 cities



Rents and Building Costs

show that while an average of 362,000 families were provided with housing in 1921-1930, the average in 1930-1934 was only 43,000, and in the last three years only about 25,000. Meanwhile there have been fire losses, condemnations, and obsolescence, to say nothing of marriages and population increases. Given revival of confidence, and adjustment of costs in reasonable ratio to rents, building in 1936 should show marked progress.

Is the Improvement Lasting?

The improvement in business this Fall, after only a nominal Summer recession, naturally is influencing sentiment very favorably. It is plain that 1935 will close with more genuine confidence in the outlook for the coming year than there has been at any time since the depression started. In the most trying year of the depression, 1932, business was oppressed by the fear that the economic system itself, the system of specialized production and exchange of goods, was breaking down beyond repair, and that its powers of recuperation had been destroyed. This fear was proved unfounded by the beginning of world recovery in the Summer of 1932, but it was later succeeded by the fear that governmental interference, experiments in a managed economy, fiscal extravagance, taxation and waste, would block the natural recovery. Of course these handicaps are still present, and they limit confidence. But after the 1935 experience of persistent improvement despite unfavorable conditions, and extension of the recovery movement to durable goods lines, business men are more disposed to believe that the natural recuperative power of the economic system is the important thing; and that it can to a considerable degree overcome the handicaps. This shift of emphasis from the difficulties to the natural power of recovery has been the great gain in the psychology of business during 1935.

In view of the spread of the improvement and the better sentiment described, which in the absence of fresh disturbances will naturally lead to more confident forward planning and larger expenditures by business, any recession from the present levels will doubtless be considered temporary. However, the possibility of such a recession, some time in the first half of next year, is engaging attention, on the theory that a part of 1936 business is being done now. This of course has special reference to the automobile business, as already described; and if the automobile industry curtails substantially during the first quarter, or is unable to make its seasonal gains during the second quarter, all business will be affected.

Also it is recognized that any strong upward movement, accompanied by price advances, usually runs into a breathing spell, necessary to permit the absorption of goods produced in excess of immediate needs. Even in the most normal times there are fluctuations of business due to such conditions. The textile industries, for example (except cotton), have had a period of remarkable activity ever since the strike in September, 1934. Rayon yarn shipments have broken all records, and wool consumption has been exceeded in only one peace-time year in our history. Silk consumption also has been very high. Experience has shown that a high rate of activity in these industries in one year is generally followed by a slackening in the next year, and it is possible that production of silks and woolens next Spring will be less than it was in the Spring of this year.

Such variations as these are not of great concern if confidence is maintained and there is no major disturbance in economic conditions.

The Unfavorable Elements

Aside from these possible reasons for a temporary recession, the unfavorable elements in the business situation are chiefly those which have existed during the past year, or others similar in character. There is uncertainty both as to the Constitutional status of past legislation, notably the A.A.A., and as to what proposals may be put before the new Congress, or advocated by the candidates as the election campaign gathers way. The burden of taxation is already a burden on enterprise; and at the same time the apparent impossibility of balancing the budget within at least two years shows that still higher taxes will eventually be levied.

None of these handicaps is a new one. Recovery has made progress despite them in 1935, and the evident belief is that it will continue to do so in the coming year.

Possibly the chief danger of new disturbance is political, in the nature of fresh experimentation or measures discouraging enterprise. As long as there is unemployment, the

industries are a target for attack, and the proposal to legislate a 30-hour week is a threat. An increase of industrial costs, which a change of this importance would entail, would be a very unfavorable development at this time.

Merchandise Prices Advancing

The question of prices of manufactured goods is pertinent now because the cost of materials has been moving up, and these cost increases in turn are advancing prices of finished goods. Since the first of June wool has risen 23 per cent, cotton 6 per cent, silk 59 percent, rubber 7 per cent, and hides 5 per cent; also the non-ferrous metals, pig iron, coal, and other industrial raw materials, have advanced in varying degree. Some semi-finished steel prices have been raised, and there is talk that the advance may extend to finished steel.

Among the finished goods that have been marked up at wholesale are woolens, silks, sheets and other cotton goods, hosiery, clothing, shoes, gloves and other leather goods, rugs, draperies and upholstery fabrics, and furniture. Retail prices are reflecting these markups. The Fairchild index of department store prices, issued monthly, has shown three consecutive advances, beginning with August, and the October increase of 1.2 per cent brought the index above a year ago for the first time.

Advancing merchandise prices keep the cost of living moving up, although the rise in food prices, which was the factor in raising living costs earlier this year, has flattened out. The increased cost of living, in turn, is the argument put forward in favor of wage increases, although wage increases would in most cases cause fresh price advances.

Whether price increases such as those cited tend to improve or impair the balance in price relations, as a whole, is a subject upon which it is impossible to generalize. Where they correct a previously inequitable return to the producer of the raw material, or restore profits to manufacturers who have been unable to recover their costs, they obviously improve the general situation. On the other hand, where they represent attempts to cover costs that are out of line and should be reduced, or where they have to be maintained by purposeful restriction of output, they will for a certainty diminish trade and interfere with the recovery.

What Policies Should Govern in Naming Prices?

Unquestionably the naming of the right price for finished goods is one of the most difficult of the problems before the manufacturing industries at this stage of the recovery. The industries must not only maintain their profits, but in most cases need to increase them, and this is as necessary for business as a whole as for the corporations individually. But shall the effort to earn profits be made upon a policy of narrow margins, low prices, and appeal to the broader market, or upon wider margins, higher prices, and a smaller volume? Different manufacturers will find different answers for themselves, but surely there can be no doubt as to the correct answer for business as a whole. The paramount need is to increase the volume of trade and production and to give more employment. This requires, as it always has, prices that fit the market and move goods. It requires that the industries look for profits to the reductions in costs which come from increased volume, as well as to those which come from improved efficiency.

It cannot be too often emphasized that this is a joint problem of capital and labor. Neither can prosper unless trade flourishes and employment is abundant, and trade will not flourish unless capital and labor cooperate to make prices which will move goods. Yet it is likely that as demand for their products increases some manufacturers will be tempted to advance prices unwisely, in the effort to recover their earnings more rapidly than is in fact practicable, and it is almost inevitable that as the industries begin to show in the black they will face demands for wage increases.

The efforts of labor are directed to obtaining higher money wages, but income distributed in the form of money wages enlarges the buying power of the wage-earning group only, and disturbs the balance unless there is a corresponding gain in other groups. Even if wage increases can be met out of earnings, and therefore do not cause price advances, they block price reductions. In either event all those not receiving the higher wages are penalized; and this includes the majority of the customers of the industries, who come from the farms, from services, and elsewhere outside the ranks of industrial employes.

On the other hand, reduction of prices as progress permits gives to every purchaser a larger return for his money, thus increasing the buying power of everyone. The benefits of progress are extended automatically to the entire population, and not merely to separate groups. The distribution of income is better balanced, prices are in better relations, and trade is better. All this is applicable to the present situation, when wage rates are already as high as in 1929, while it is agreed that business is still far from normal, and that the continuing need is for policies that will carry the recovery forward.

The Brookings Institution, of Washington, an organization of high standing for research in the social sciences, has recently completed a lengthy study bearing on these questions. Its findings are published in four volumes, the last of which is called "Income and Economic Progress", and the conclusions are sim-

ilar to those given. We have space for only a brief quotation:

The wage increase method of disseminating the benefits of technological progress would not extend to more than 40 per cent of the population. In contrast, price reductions benefit the entire population . . . The broad highway along which continued economic progress must be sought is the avenue of price reductions . . . Such a procedure seems to us to assure the maximum gain to the masses both in the short-run. and in the long-run. At the same time it does not destroy the profit motive nor jeopardize the winning of such profits as are necessary to maintain our capital fund and make possible the financing of improvements in plant and equipment on a basis even more liberal than that now obtaining.

The source of the profits, in the view of the author, is to be found in the principle that "added volume of business ordinarily pays heavily."

The doctrine thus presented is no novelty to American business leaders. We have taken occasion many times to refer to the policy of the automobile industry in constantly offering a better product at lower prices. In our September, 1934, issue we quoted the following from a statement to shareholders made by Alfred P. Sloan, Jr., President of the General Motors Corporation:

The objective should be not merely a more favorable relationship of cost to selling prices, but what is of more vital importance, real selling prices themselves must be reduced—they must be brought within the range of a greater number of buyers. In no other way can industry be stimulated to higher levels of activity—in no other way can the unemployment question be intelligently attacked—at least that is the thinking of General Motors and its approach to the problem.

We can do no better than repeat our comment at that time. "This situation calls for precisely the spirit and policy of Mr. Sloan's address, and all groups and classes are alike concerned in supporting it."

Money and Banking

The volume of bank reserves and surplus funds has continued to pile up under the influence of the heavy capital inflow from abroad. During the four weeks ended November 20, the cash reserves of the member banks increased by over $200,000,000 to $5,782,000,000, at which point they were approximately 113 per cent in excess of the legal requirements based on existing deposit liabilities. In dollars, the amount of the "excess" was $3,070,000,000, representing a potential reserve base capable of supporting an additional 30 billions or more of deposits, calculating on the basis of the usual rule-of-thumb ratio of something over $10 of deposits for every $1 of reserves. It is the existence of this huge volume of "excess," created in large part by the gold imports over the past two years, that has raised the issue of inflation.

It is generally admitted that these great "excess" reserves, if not controlled at the proper time, may constitute a serious menace for the future. During the discussions over the banking bill passed in the last Congress the inflation danger latent in these reserves was urged repeatedly by Government spokesmen as reasons for bringing about a greater centralization of control powers within the Federal Reserve System. As a result of the deliberations of Congress, the powers of the Reserve Banks to act, and to act effectively, have been greatly strengthened. The authority of the Board of Governors of the Federal Reserve System over open market operations and discount policy has been increased, and the Board has been given power to raise or lower reserve requirements within limits. It remains to be seen how successful we shall be in using this new machinery properly.

Up to now, of course, the temper of the people has been such that there has been little attempt on the part of the general public to exploit in a dangerous way the great possibilities for credit expansion. Of late, however, there have been signs and symptoms that have led many careful students of the situation to conclude that it would be wise to take some preliminary action in the form of mopping up a part of the "excess" reserves, with the view, not of restricting credit, but merely of reducing the "excess" to more manageable proportions, and so putting the credit control mechanism in a better strategic position for combatting any unsound tendencies that might arise. It is argued that not a little of the buying in the stock market, while for cash, is nevertheless based on the belief that inflation is inevitable, and that a warning gesture made at this time might save a great deal of grief later.

The Federal Reserve authorities, after a careful study of the situation, have concluded that the moment is not yet opportune for any change of policy. Chairman Eccles, of the Board of Governors of the System, in a statement has pointed to the large amount of unemployment and idle plant capacity that exists in the country; also to the fact that the rise in the stock market, which has occasioned so much comment, is being financed almost entirely by cash purchases, with practically no increase in brokers' borrowings.

Undoubtedly the situation is one of great complexity, and caution is justified that nothing be done that would check the recovery of business becoming more visible on all sides. At the same time it must be recognized that there are dangers inherent in the present excess of credit, that the trend of developments will require careful watching, and that there is always danger that, because of excess of caution, control measures will be delayed too long. It is desirable that there should be discussion of the situation, and a public opinion created that will support Federal Reserve action when it comes.

The public should realize also that the problem of credit control is related intimately to the problem of Federal budget. As was stated in these columns a month ago, until the budget is in balance, or moving definitely towards a balance, the Federal Reserve will be in an exceedingly awkward position for opposing whatever undue credit expansion might develop. "Excess" reserves are an important factor in the high prices of Government securities and in the marketing of new Government issues. Any move, therefore, to reduce these "excess" reserves involves a risk of impairing the demand for Government loans at a time when the financial needs of the Treasury are increasing. It is unlikely that the authorities will be in any hurry to assume this risk. Until the Treasury, by balancing expenditures against income, is able to lessen its dependence upon the money market, the Reserve Banks will be tremendously handicapped in their management of credit.

Additions to Monetary Stocks

In November, as in earlier months, the additions to bank reserves have been attributable to gold imports. Because of a combination of influences, including repatriation of American capital, confidence on the part of some foreign owners of capital in the situation in this country, and lack of confidence on the part of other foreigners in their situation at home, the demand for dollars has been in excess of the supply, thus leading to gold shipments which have added further to our already swollen monetary stocks. As this gold has come into the country it has been sold to the Treasury and the proceeds deposited in the Reserve Banks where it has carried the member bank reserve balances to new high levels in the manner already described.

During the first 28 days of November, total gold imports amounted to $161,000,000. This gold came mainly from France, which is experiencing another wave of uneasiness over the safety of the franc. With the assembling of the French Parliament on November 28, there has been uncertainty as to the outlook for the Laval Government and for the program of deflation instituted for the purpose of improving the status of the budget and maintaining the stability of the currency. Because of the fears existing in Paris, French funds have been moving both to London and New York, contributing to firmness in sterling exchange and accentuating the heavy gold flow to the United States. Of the $161,000,000 mentioned above as having been received in this country between the 1st and 28th of November, $131,000,000 came from France, with approximately $152,000,000 reported to be en route or under contract for shipment. Moreover, in addition to gold lost to the United States, it is believed that the Bank of France has lost gold to the British Equalization Fund which is understood to have bought francs during the course of its stabilization operations. In the four weeks ended November 21 the gold losses by the Bank of France aggregated $207,000,000 prompting an advance of the bank rate from 3 to 6 per cent. It is true that the position of the Bank of France is still very strong, the reserves of metal on November 21 measuring 72 per cent against combined deposit and note liabilities. It is generally recognized, however, that the question of the future of the franc is not a question of gold, but of the determination and ability of the French people to effect the internal readjustments necessary to bring French costs and prices in line with costs and prices in other countries whose currencies have been devalued.

Weakness in the French franc has communicated itself to all gold bloc currencies, arousing fresh talk of devaluation of the Dutch and Swiss units. Approximately $2,000,000 of gold was imported by the United States from Holland during the month.

Counting shipments received during November, total receipts of gold by the United States since the current movement commenced in September have amounted to nearly $633,000,000, which comes close to the record-breaking inflow in February-April, 1934, following stabilization of the dollar. Altogether since stabilization, the total amount of gold received (net excess of imports over exports) has reached the extraordinary total of $2,633,000,000. Whether a devaluation and stabilization of the gold bloc currencies would be followed by a return flow of funds similar to that which followed devaluation in the United States and Belgium is an interesting question. It is probable that some return movement would occur in order to profit on the exchange and to participate in the rising prices to be anticipated in the home markets. Were the gold currencies, however, merely allowed to depreciate, without attempt to fix the limit of depreciation, it is unlikely that much repatriation of funds would take place.

Money Still on the Bargain Counter

Money rates were practically unchanged during the month, despite pressure of growing "excess" reserves, the general level of quotations being already close to the vanishing point. At the close of the month new offerings of 110-day Treasury bills were being discounted on an average basis of 0.063 per cent, with 273-day maturities taken at 0.131 per cent. Holiday trade is expected to call for increased currency requirements for hand-to-hand circulation, but should have no visible effect on the money market, owing to large supplies of funds.

In the bond market, high grade corporate and municipal issues were generally steady

around the high prices prevailing for some time. U. S. Government obligations were dull and a trifle easier, reflecting uncertainties regarding the budget, soldiers' bonus prospects and political difficulties in Europe. The feature of the market was an improvement in second grade rails, based on better railway traffic and earnings prospects. New corporate financing was active, but largely confined to the replacement of higher coupon by lower coupon issues.

The Demonetization of Silver by China

The past month has witnessed an epoch-making event in monetary history—the demonetization of silver by China. On November 3, the Chinese Government announced a drastic readjustment of its monetary and banking system, involving, according to cable despatches:

(1) the nationalization of silver and order for its surrender to the Chinese official banks against paper, dollar for dollar, (2) drastic penalties for the private holding or use of silver hereafter, (3) an export tax on the metal to make its legitimate shipment out of the country unprofitable, (4) provision for the maintenance of the exchange value of the Chinese dollar at its present level with respect to leading foreign currencies, (5) establishment of the notes of the three Government-owned banks,—the Central Bank of China, the Bank of Communications, and the Bank of China, —as full legal tender for payment of taxes and of public and private obligations, and (6) establishment of the Central Bank of China as a central reserve bank, with after two years the sole right of note issue.

The substance of the above is that China has abandoned silver as a standard money, and has determined upon a managed currency, with paper as the medium for internal circulation. With this action, the last of the great countries adhering to silver as a monetary base has been forced to desert that metal. One by one over the past one hundred years the principal nations of the world have given up silver as a basic money, and have turned to gold or some modified form of the gold standard. (During the depression, it is true, a good many nations have found it impossible, or at least inconvenient, to adhere to any metal standard). Only China has continued to cling to silver, its traditional standard money for centuries.

Action by the Chinese Government in abandoning silver has been foreshadowed ever since the United States Government commenced its silver purchase program over a year ago. From the time when it became apparent that the Administration intended to proceed vigorously to carry out the terms of the Silver Purchase Act (it will be recalled that the law gave the President discretion as to the rapidity of buying), the only question has been as to how long China could hold out. Although advocates of the American program argued that raising the price of silver would increase the purchasing power of the Chinese people, and so restore trade in the Orient, the prevailing opinion outside of the silver party was that it would do just the reverse. At the time last year when the Silver Purchase law was under consideration in Congress, we gave some attention to this issue in our Letter of June, 1934, and predicted that if the Act were put into operation it might drive China off silver and on to a depreciated paper basis. Following is a reproduction of several paragraphs from our June, 1934, Letter:

Arguments of the silver party are to the effect that raising the price of silver will increase the buying power of China and therefore increase this country's exports to China. Falling prices in China in the last several years have been having precisely the same effect that falling prices have been having in the United States, to-wit, causing losses to all producers and throwing wage-earners out of employment. But the falling prices there are silver, not gold, prices, and have been falling because of the rise of silver engineered in Washington and on the metal exchange in New York.

Apparently there is not the same probability that silver will move from China to the United States that there is of its moving from India or elsewhere, for the Chinese Government probably will take further action, if necessary, to prevent the denudation of the country, but it is a serious blow to the real market position of silver that China has ceased to be an importer; and if silver should be lifted to 27 to 1 and business in China must be adjusted to that basis, it will not be able to import silver until the readjustment is made.

As a measure of relief China may conclude to go to a depreciated paper basis, which would enable her to have any amount of money she wants and at a value to suit, and might provide a gold basis for the paper by selling her silver to the United States if the price continues to rise here.

Most of which has been borne out by subsequent developments. During the past year the high silver prices, brought about by U. S. buying, together with the loss of silver drained off to the United States, have exerted a severe deflationary influence upon China, particularly in the more highly industralized sections. For a time the Chinese Government endeavored to combat the ill effect of the American policy by means of an equalization fee and tax on the export of silver. The result, however, was to place a high premium on smuggling, and the drain on the Chinese money system continued, causing acute monetary stringency, numerous failures, and general depression.

Instead of the expansion of Chinese buying which the silver advocates predicted would eventuate from the silver boosting program, Chinese foreign trade has fallen during the past year. The fall, moreover, has been particularly severe with respect to imports. During the first ten months of the year imports were off 11 per cent in value from imports in the corresponding period a year ago, while in the latest month, October, the reduction was 23 per cent from a year ago. Although it has been argued that the reduction in imports may be accounted for largely by lessened purchases of cotton and tobacco in the United States following upon the crop restriction programs in this country, it will be noted that the Chinese have not offset their decreased purchases of cotton and tobacco by increased purchases of other things. Exports have held

up surprisingly well during the year, notwithstanding the high value of exchange. Figures for ten months were practically equal to those of the corresponding period last year, while figures for October were 13 per cent above last year. This relatively high level of exports is attributable to the fact that the world demand for certain Chinese products, including wood oil, seeds, antimony, tungsten, and silk has been strong enough to maintain prices and the flow of goods in spite of the adverse influence of exchange.

The Drop in Exchange Rates

The announcement of China's new currency system was preceded by a sharp drop in Shanghai dollars during October from around 37 cents to just under 30 cents. Hong Kong dollars, which had been above 52 cents in August and were quoted around 48 to 50 cents at the beginning of October, weakened sharply after mid-October in sympathy with Shanghai exchange, and by November 10 were down to 34 cents, following which there was a recovery to around 37 cents. Over the past year the Hong Kong dollar has sold consistently above the Shanghai dollar, for the reason that the former, not being subject to the equalization fee, has continued to be quoted at its silver parity. With the further drop, however, in the Shanghai exchange the Hong Kong authorities apparently have considered it desirable to bring about some readjustment of their rate to levels more in keeping with the currency of the rest of China, and the market has acted accordingly.

While the Chinese Government has declared its intention to maintain the present value of the Shanghai dollar in terms of foreign currencies, it has as yet given no assurance as to which of the several leading foreign currencies, if any, it has in mind to tie to. It is obvious that until U. S. dollars, sterling and yen are stabilized with reference to each other China cannot tie to all three of them at once. The prevalent opinion now is that America's silver experiment is likely to result in one more addition to the growing community of nations allied to sterling, though it is admitted that much depends upon Japanese influences and what proves to be the course of the yen. For the time being the rate is being held steady against the pound at 1 shilling 2½ pence per Chinese dollar, a relationship which involves slight fractional variations against U. S. dollars, depending upon sterling-U. S. dollar fluctuations.

Outlook for New Program

Interest in China's prospects of success in reorganizing and stabilizing its currency system is naturally very great among all those doing business in that country. It is clear that the Chinese Government is taking a momentous step in attempting to convert 400,000,000 people, long accustomed to the use of silver, to the use of paper money, and it is certain that the Government would never have attempted to do so had not the situation become desperate as result of the continued drain of specie to America, and contraction of credit and loss of confidence resulting therefrom. It is evident that the path is beset with many difficulties and uncertainties.

In the first place, there is doubt as to how much silver the Chinese Government will be able to get out of the people in exchange for paper. The authorities, of course, can take over the silver held by the banks in Shanghai and a few other large cities, but the attitude of the public with respect to the surrender of silver is highly problematical, to say the least, particularly in the areas outside of Nanking's immediate sphere of influence. In view of recent political developments in North China, it is questionable whether much silver from that area can be counted on to flow into Nanking coffers. Moreover, it must be borne in mind that the further fall of the Chinese dollar has increased the incentive to smuggling.

In the second place, there is uncertainty regarding the future of exchange. Undoubtedly, the success of the stabilization plan will be conditioned very largely by the extent to which the Government is able to establish confidence in its ability to manage a paper currency without the safeguard imposed by the requirement to maintain certain specified reserves of metal. It is always a question as to how far a government attempting a managed currency can be trusted to impose voluntary restraints upon itself, and the question becomes still more important when, as is the case with China, the government attempting management lacks a strong, highly centralized authority. It can be said on behalf of the new currency plan that the low level of stabilization enhances its chance of success. Internally, the country is experiencing a release from deflationary influences. Security values have shown a tendency to recover, and, what is more important, there may be and should be an unblocking of the stream of credit in the real property market. Externally, the low rate of exchange should tend to improve the balance of payments, which, as indicated in an earlier paragraph, was already showing a tendency to become less adverse. At the same time, the nationalization of silver, even though not broadly successful, will provide the Government with a large fund of silver which it can sell abroad, if need be, in support of exchange. In Shanghai the Chinese banks alone hold $295,000,000 (Chinese dollars) of silver which will be available immediately to the control board, and of course a great deal more silver will be got in than this. When all has been said, however, it must be

repeated that everything depends upon the degree to which the Government is able to inspire respect for and confidence in its policies.

The Situation as Affecting Silver

The outstanding feature of the situation from the standpoint of silver is that China now has a huge quantity of the metal which she can sell as freely as she wants to in world markets without injury to her internal credit structure. How much she will sell will depend upon (1) the extent to which the drop in the exchange rate, and consequent increase in the premium on silver, encourages smuggling rather than compliance with the nationalization order, (2) whether the Government follows a policy of selling only so much as needed in order to maintain the stability of the currency, in which case the determining factor will be the degree of confidence which the Government is able to engender in its currency control, and (3) whether the Government hopes eventually to return to the silver standard on some devalued basis, in which case it will sell no more silver than it has to, or whether it intends to permanently demonetize silver in favor of some form of managed paper currency, in which case the quantity of silver in China available for sale would be enormous.

Should China elect to dispose of her vast silver hoards, the effect upon silver would be catastrophic. Either the United States Treasury would be forced to hold the bag, enabling China to unload at high prices, or see the whole scheme for raising silver prices go into collapse. When consideration is given to the depressing influence exerted upon silver prices from 1926 on by the stocks in the Indian Treasury which never amounted to more than 470,000,000 ounces, it is possible to visualize what it would mean to have China's 2,000,000,000 or so ounces overhanging the market.

No doubt it would be an exaggeration to assume that any such quantity of silver could or would be disposed of, at least not for a considerable period. However, the fact is that a policy supposedly friendly to silver is having the effect of giving the Chinese people an enforced education in the use of another form of currency — paper. To the extent that the Chinese prove to be apt pupils in this schooling, by just so much will silver have one of its most important uses permanently curtailed.

It has been claimed by friends of the American silver policy that by raising and holding up the price of silver it would encourage a wider use of the metal among the nations. As a matter of fact the reverse appears to be happening. As silver has been made more costly, country after country, including at last China, has found it advantageous to discontinue its use as money. Unless the United States can persuade the other nations to use more silver money (something which thus far they have shown very little disposition to do) before its buying power as defined in the Silver Purchase Act is exhausted, it looks as though silver were headed eventually for another slump, possibly to levels lower even than before. In that event, not only will the silver producers pay dearly for this experiment, but the United States Treasury will be left carrying an asset against the currency that could not be liquidated save at tremendous sacrifice.

Taxes and National Income

During the past month two reports have been issued by government departments in Washington which contain new and interesting data regarding the widely-discussed subject of taxes and national income. The Treasury Department released its final statistics of income for the year 1933, showing that the direct taxes paid by all business corporations in the United States in that year were approximately $2,547,000,000, as compared with $2,373,000,000 in 1932. Its report shows that for all corporations combined there was a deficit after taxes in 1933 of $2,379,000,000, including non-taxable income but excluding intercorporate dividends, that 75 per cent of all active corporations operated at a loss and that the deficit in 1933 follows a deficit of $5,375,000,000 in 1932 and a deficit of $3,145,000,000 in 1931. The year 1930 was the last in which the income account of all corporations was on the right side of the ledger.

We are reprinting herewith a condensed summary of the returns of all corporations since 1921, compiled from the official income tax statistics, that was given in the April, 1935 issue of our Bank Letter, to which we have added the final 1933 figures:

Total Receipts, Interest, Taxes, Net Profits and Dividends of All Corporations in the United States
(In Millions of Dollars)

Year	Total Receipts	Interest Paid	Taxes Paid	Net Profits After Taxes*	Cash Dividends Paid*
1921	$ 91,438	$ 3,141	$ 2,175	$ D-55	$ 2,687†
1922	101,315	3,069	2,302	4,380	2,634
1923	119,020	3,278	2,572	5,827	3,299
1924	119,747	3,445	2,552	4,999	3,424
1925	134,780	3,617	2,944†	6,971	4,014
1926	142,629	3,989	3,108	6,775	4,439
1927	144,899	4,375	3,145	5,880	4,765
1928	153,375	4,581	3,387	7,636	5,157
1929	161,158	4,925	3,415	8,083	5,763
1930	136,598	4,861	3,009	1,376	5,631
1931	108,057	4,492	2,630	D-3,145	4,182
1932	81,638	4,043	2,373	D-5,375	2,626
1933	84,234	3,511	2,547	D-2,379	2,102
Total 1921-33	$1,578,888	$51,327	$36,159	$40,973	$50,723

D- Deficit. † Partly estimated. *Excluding intercorporate dividends paid and received.

Aside from the continued deficit in 1933, despite the rise in sales and other income, it will

also be observed that dividends paid in 1933 were the smallest since 1922, the first year for which complete official figures were compiled, and that interest payments were the smallest since 1924, reflecting both defaults and refundings at lower rates.

Taking the entire thirteen-year period, 1921-1933, the net profits after taxes of all American corporations averaged but 2.6 per cent of gross income; interest charges absorbed 3.3 per cent, taxes 2.3 per cent and the remaining 91.8 per cent was paid out for wages, materials and other costs of operation. Dividends paid averaged 3.2 per cent of total income, but exceeded net income by some $10,000,000,000, this amount representing a draft upon capital. Corporations paid about 90 cents of direct taxes for every dollar of net income after taxes, exclusive of sales and other taxes for which the corporations acted as collecting agents.

Unsatisfactory Showing in 1934

The preliminary report on statistics of income for 1934 will be issued sometime soon and it is expected to show an improvement over 1933, judging from the results of individual companies, but whether or not the improvement will be sufficient to pull the group as a whole out of the red is a question. A measure of the 1934 results for the country at large, however, is afforded by the second report referred to, namely, the recent estimates by the Department of Commerce on the total national income produced and paid out by the American people. The Department estimated that in 1934 the total of national income produced was $48,561,000,000, while the total income paid out to individuals in that year was $50,189,000,000, indicating a business loss of $1,628,000,000 during the year.

The last year in which income produced exceeded income paid out and in which there was any net business saving was 1929, while the cumulative business losses of the five years 1930-1934 total $26,631,000,000. The indicated losses would be even greater were it not for the fact that the work-relief payrolls of the C.C.C., C.W.A., F.E.R.A., and other agencies, as well as the salaries of regular government employes, have all been counted as part of the national income produced. This procedure gives the somewhat paradoxical result of larger relief expenditures causing larger national income.

The foregoing figures on individual and corporate income and losses should be absolutely basic to any consideration of the many plans for reviving and reforming business, since most of the proposals call for the imposition of increased taxes and operating costs in one way or another that would be contingent upon the ability of business to carry. Too often, however, the people who have an interest and responsibility in national planning have never informed themselves as to the financial statistics of business, or else do not keep the latest available data before them. It is a common mistake to assume from the earnings of a few outstanding organizations that American corporations in the aggregate operate at profit margins that are excessive, or that are at least ample to absorb much of the cost increases proposed. A study of the actual figures will show that the profit margin of representative concerns is extremely narrow and that a great many concerns are making no profit whatever. Moreover the consolidated figures are not representative of actual practice, as there is no pooling of earnings between those making a profit and those running at a loss. It is axiomatic that every further increase in costs and taxes has the effect of forcing more border-line concerns out of business and thus retarding rather than promoting recovery.

Total Taxes and Expenditures

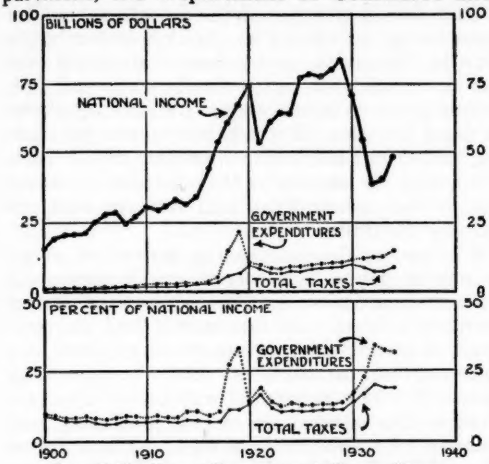
In 1934 the total tax collections in this country, including individual as well as corporate taxes and embracing Federal, state and local governments, were estimated at approximately $9,500,000,000. This was 19.6 per cent of estimated national income produced, even counting as income produced the salaries of all persons in the regular employ of all governments or on work-relief. Obviously the percentage would be considerably higher if it were calculated only on the income produced by those outside of government service.

Furthermore, tax collections represent only that portion of government expenditures that is being met out of government receipts, when as a matter of fact the combined expenditures of Federal, state and local governments have been running substantially in excess of tax collections since 1930 and the deficit financed by increasing the public debts. If government expenditures in 1934, for example, had been fully paid by government revenues, the nation's tax bill would have been not $9,500,000,000 but around $15,500,000,000. The difference simply represents taxes postponed for future payment, with interest. Whereas tax collections in 1934 represented 19.6 per cent of national income, total government expenditures represented 31.9 per cent of national income.

Total government expenditures in 1934 were 431 per cent higher than in 1913, while the per capita expenditures of governments increased from approximately $30.00 to $123.00 or by 305 per cent.

The chart below shows the movement since 1900 of (1) combined net expenditures of Federal, state and local governments, including capital expenditures for permanent improvements but excluding expenditures for debt retirement or for tax refunds; (2) combined net tax collections of Federal, state and local gov-

ernments, excluding tax refunds; (3) estimated national income of the people of the United States. The chart is based on data compiled by the Bureau of the Census, the Treasury Department, the Department of Commerce and



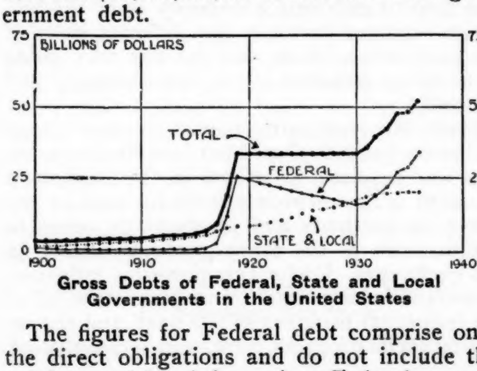
Tax Collections, Government Expenditures and National Income in the United States

the National Industrial Conference Board, with certain years partly estimated and the latest figures preliminary.

This chart gives a condensed picture of the enormous increase that has taken place in taxes and the still larger increase in government expenditures, with the difference financed by borrowing.

Expansion of Debts

Combined debts of Federal, state and local governments, totaled about $3,000,000,000 in 1900, $5,572,000,000 in 1913, $33,556,000,000 in 1919 and approximately $47,226,000,000 in 1934, of which $27,053,000,000 consisted of Federal debt and $20,173,000,000 of state and local government debt.



Gross Debts of Federal, State and Local Governments in the United States

The figures for Federal debt comprise only the direct obligations and do not include the contingent debt of the various Federal government credit agencies, which on September 30, 1935, had total liabilities of $7,942,000,000. A summary of the available statistics, partly estimated, on which the charts are based is given for selected years since 1900:

Summary of Total Tax Collections, Government Expenditures, Public Debts and National Income in the United States

(In Millions of Dollars)

Year	National Income Produced	Tax Collections Total Amt.	Tax Collections % of Nat. Inc.	Gov't Expenditures Total Amt.	Gov't Expenditures % of Nat. Inc.	Gross Public Debts
1900	........$16,200	$1,342	8.3	$1,492	9.2	$3,034
1905	 25,100	1,535	6.1	1,888	7.5	3,854
1910	 30,100	1,994	6.6	2,580	8.6	4,859
1913	 33,700	2,187	6.5	2,919	8.7	5,572
1915	 34,500	2,699	7.8	3,649	10.6	6,820
1920	 74,300	10,153	13.7	11,024	14.8	33,099
1925	 77,100	7,884	10.2	9,937	12.9	33,662
1929	 83,000	9,759	11.8	11,709	14.1	33,710
1930	 70,300	10,266	14.6	12,373	17.6	33,878
1931	 54,600	9,300	17.0	12,855	23.5	35,486
1932	 39,400	8,147	20.7	13,417	34.1	39,172
1933	 41,800	8,144	19.5	13,478	34.2	42,468
1934	 48,561	9,500	19.6	15,500	31.9	47,226

Wealth and Its Distribution

In preceding articles on this subject we have endeavored to picture a historical background of the modern economic system from its past development. The best approach to every social problem is from the historical side answering the questions: How did the disturbing conditions arise? What were preceding conditions, out of which the present ones developed? The state of business depression with which the world has been struggling for the last six years is essentially a social problem, a problem in human relations.

We have sought to describe the simplicity of primitive society and of the economic system in its beginnings, to show that the economic system has undergone no radical change in principle since early times. Its beginnings were in the simple exchanges among neighbors, which became more important as their knowledge of the world about them increased, and their wants and productive capacities developed. Gradually they learned about "wealth" —a general term including all desirable things. They found natural wealth about them, and learned to make things of value, then discovered that frequently they could trade advantageously. As they gained in knowledge of different kinds, production became specialized, more "wealth" was produced and the volume of "trade" increased, and this describes the development of the "economic system" down to the present day. It is based upon the principle of specialization in production and the resulting exchange of services. Of the economic gains by the "division of labor," as the older economists called it, but more recently called "specialization," there can be question. It was demonstrated early in the hand trades, with their specialized skill and specialized tools, and obviously the gains are greater with specialized and power-driven machinery, often more or less automatic. From the very beginning, man in his efforts to create "wealth" has sought the aid of tools, and has improved the tools as rapidly as he could do so.

The Need for Increasing Productive Power

There is need that productive power shall increase per capita faster than population. An increasing population is subject to certain inherent disadvantages which must be overcome or they will affect the general welfare. The stores of natural wealth which had been accumulating for thousands of years, such as the minerals, forests and soil fertility, which at first were free or cost but little effort, gradually become scarcer and more costly. The abandoned farms and cut-over-land of the older regions are significant, and the very increase of numbers is an obstruction to movements and adds to the costs of living. It costs more now to deliver milk and other necessities through the streets of New York City than it did 100 years ago, and the cows cannot graze on the commons, or fuel come free from public forests, as at one time.

Against these subversive influences we must oppose the constructive influence of improvements in methods of production and distribution—the results of invention, of scientific research and of wealth accumulation in the form of productive equipment. The net result of these opposing influences determines whether society moves forward or backward. Unless each succeeding generation make some lasting contribution to the productive capacity of its successors, it will have exploited the natural resources, and left an increasing population to face harder living conditions than its own.

The people are always expecting that conditions will improve. They want the hours of labor shortened; they want a greater abundance of comforts and all "desirable things"; they hope for better conditions for their children than they have had for themselves. These wants and ambitions are wholesome; they are stimulating to the spirit, and to the aspirations that lift us to higher levels of thinking and living; they are a spur to effort and a sign of latent capacity for higher development. But with an increasing population the only way these desires can be satisfied is by organization and cooperation, i.e., by specialized production, exchanging services and constant improvement in the methods of all business.

The Exchange of Services

We offer apologies for the possibly tiresome emphasis upon the exchange of services. The object is to impress the reader that there is no limit to the volume of business that may be done by a truly reciprocal system of production and trade. Reciprocal trade means fair trade—an exchange of equal values in different commodities or services, as rated normally in the markets. This depends upon properly balanced relations in production and prices, just as all parts of every kind of an organization must be in right relations to each other. Without correct relations there is no organization—nothing but disorder. But if the exchange relations are reciprocal there will be no limit to trade, short of productive capacity, or the complete satisfaction of all wants.

The wants of most of the people are so far from being satisfied that this latter limitation may be dismissed; no business depression ever has occurred because all wants were satisfied. Wants press constantly upon purchasing power in most families. But whence comes purchasing power? This is the question of all questions, and the answer is that it exists nowhere but in the commodities and services that are moving in trade.

Obviously, the purchasing power of every branch or group of the economic system is in what it has for sale. Money as used in the exchanges is only an instrument and convenience; it is not original purchasing power, for commodities or services must be given to obtain it. The source of values is labor applied to the natural resources, producing real "wealth", i.e. "desirable things". These forms of wealth offered in the markets buy and pay for each other. Thus the purchasing power to clear the markets exists in the commodities and services themselves, if they are produced and priced in right relations to each other. Every business depression ever experienced has been caused by confusion in the exchanges, the point where distribution into consumption is accomplished.

Proceeding now from the above premises it should be evident that when all of the industries improve their methods, thus increasing their volume of production at lower unit costs, and all exchange their increased production with each other, there will be neither overproduction nor unemployment. The only change will be *more of everything for everybody.* The key to enduring prosperity is in the balanced relations between the different parts of the economic system, and the one sure guide to balanced relations is the law of supply and demand.

Since the purchasing power of every group and every individual member is in its own products and services, as valued in the markets, a constant inducement is offered for each to improve its methods and products, in order to obtain more of the other products offered in the exchanges. Under this powerful influence, persistent from generation to generation, all of the industrial progress of the past, and the resulting social progress, have been accomplished.

The Value of Exceptional Men

Throughout all past time the development we have hastily sketched has been going on, extending the bounds of knowledge and the command of man over the resources of nature. It is all a process of learning how to do the

work of supplying human wants by the most effective methods. It is "saving" labor, not by making it idle, which would be wasting it, but by making it more effective in the common service.

This progress has been accomplished gradually, by the genius and labors of exceptional individuals, here and there, among all peoples, who have been leaders and benefactors of all mankind. A few great names are identified with discoveries or achievements of the first order of importance in the annals of science or industry, but the great achievements have been the joint products of many minds working independently. The foundations of modern industry are in many countries. The names tell the story. Thus the history of the electrical industries cannot be told without credit to Franklin and Edison of this country, Galvani and Volta of Italy, Oersted of Denmark, Coulomb and Ampere of France, Faraday and Maxwell of England, Helmholtz and Hertz of Germany, and others made important contributions. Several of these names are honored in the nomenclature of the electrical industries, and the name of Watt has been honored in "kilowatt," not for any contribution to the science of electrical development, but as the premier power-engineer.

The most striking recognition of the community of interest that all peoples have in the development of science and industry was afforded by an action of the International Education Board (Rockefeller Endowment), New York City, in granting financial aid to teachers and students in German universities, in the years immediately following the end of the Great War in which Germany and the United States were antagonists. So little publicity has been given to this act in the past, that we think the following letter is worthy of publication. At the close of the War the situation of the German universities was highly critical. Their endowments had been practically destroyed by the inflation of the currency, the German Treasury was in desperate straits and the families usually contributing to university support were scarcely less so. The teachers were needing students and salaries and the students were missing. The action of the Education Board is described in the letter which follows:

INTERNATIONAL EDUCATION BOARD
61 Broadway, New York

June 13, 1925.

My dear Mr. Roberts:

Your letter of the 12th was received by me this morning. You are right in your understanding regarding the attitude of the Rockefeller boards to science in Germany. The following facts will interest you.

The International Education Board has given to outstanding men in physics, chemistry, biology, and mathematics a total of twenty-one fellowships and to agriculture six fellowships. These men study in other countries. They receive stipends in sufficient amount to pay their living and traveling expenses.

The Rockefeller Foundation has given eleven of these high class fellowships to outstanding medical men who are studying in other countries.

The Rockefeller Foundation has also supplemented the salaries of 381 promising young Germans in order that they may continue their work in science and not be lost to the scientific world.

Cordially yours,

(Signed) Wallace Buttrick.

Mr. George E. Roberts,
National City Bank of New York.

As an act of recognition of the international value of scientific or industrial achievement, by an organization endowed by a great industrialist, this gift to a recent "enemy" country is in striking contrast to the theories of conflicting interests which involve the nations in wars.

It might have been said that even though the war of arms was over, Germany as a rival in trade was still essentially an "enemy country," and that a contribution to the education of German scientists was against the interests of this country. That would be the narrow view which befogs the entire subject of industry, trade and competition. But the defects of human nature have not had their origin in the modern economic system. They ante-date it by a long time.

The action of the International Education Board was prompted by the large view, viz.: that scientific discoveries, inventions and improvements of every kind which increase the efficiency of the industries are contributions to better living conditions for the masses and should be welcomed from every source; moreover, that primarily the objective of all industrial development and organization is to serve the wants of the millions, and that the rivalries of business men are mere incidents of that service, and subordinate to it. And finally, that the largest opportunities of business have been provided by the constant expansion of the purchasing power of the masses. No conflicts arise between sound economic principles and the public interests. If opinions differ regarding such matters they go to the forum of public discussion.

The Effects of Labor-Saving Machinery Upon the General Welfare

Notwithstanding the consistent record of advancing general welfare, accompanying the age-long efforts of men to increase their powers of production, and despite the striking contrast between the standard of living of the countries of advanced economic development and that of the backward countries, doubts are still expressed as to the benefits of this "industrial progress" to the class that sells its labor.

In short, here is the old question which has occurred from time to time ever since the beginning of the machine age, and which is upper-

most now in the agitation for a shortened work-week. One view sees the machine as a competitor of labor, while the other and larger view sees the machine as the aid of labor in producing a greater abundance of the comforts of life wanted in all the homes of the land. The former view assumes that the demand for labor is a fixed and limited amount, and that if machines do any part of it, there will be less for labor to do, while the other view is that no limit exists to the demand for the products but in the ability of the people to buy them: furthermore, that if the products of each industrial group exchange for the products of other groups, there is no end of purchasing power or of employment, or of the goods they may have, but in the united powers of production.

The market for the products is with the producers themselves, and wherever the production of workmen can be increased by the use of better tools or machinery, the products are cheapened in relation to labor; in other words, the purchasing power of labor over commodities is increased. This is the record of the economic system for the last 100 years—a constant gain of the purchasing power of wages over commodities, and never so much as in recent years.

The Lesson from Agriculture

The foregoing is a logical argument and can be stated at greater length and more convincingly, but the most effective lessons on the subject are the lessons of experience. One may be drawn from the history of agriculture. We have heretofore presented the fact that 100 years ago about 75 per cent of the population of this country was required on the farms, engaged at hand labor in producing the farm products required as food or raw materials for our simple industries. On the other hand, in the census year, 1930, only 25 per cent of the population was engaged in agriculture, improvements in machinery and methods of cultivation having made this proportion sufficient to supply the demands for that class of products. The difference in numbers between 75 per cent of the total population and 25 per cent, has been released to the other industries; or to state it differently, to the production of other forms of wealth, thus increasing the aggregate of wealth production. As a national family are we not better off for this increased production of wealth?

If with the growth of population, the proportion on the farms had remained the same, and their productive capacity the same, their purchasing power would have remained the same as 100 years ago, their living conditions no better and their support to the other industries would have been no greater than then. The vast increase of manufacturing, and of interchange between agriculture and the other industries, would have been impossible. Agriculture would have had no share in the industrial gains of the 100 years and would have been a drag on the economic organization.

Effects of Certain Changes in Industry

That changes in industry may affect employment in particular lines is obviously true. We have seen that changes in agriculture have reduced the proportion of people employed in that occupation, although the actual number has not been reduced. Occasionally it happens that an industry or business is seriously affected, as when the railroads drove out stagecoaches, and the automobile industry exterminated the carriage industry. But in neither case was the aggregate of employment affected. On the contrary, in both of these examples the aggregate of employment was greatly increased, and an upward influence upon wages was exerted. To insist upon security against all changes is to demand a stagnant society, instead of a progressive society, in which the standard of living is rising. There can be no improvement without change. The changes that result from new industries, such as the railroads in their day, the electrical industry, the automotive industries, have been enormously beneficial to society upon the consumer side, and also have opened great new demands for labor on the purchasing power side.

In the last two issues we have sketched the development of power from the natural forces, and its influence upon the industries. No such source of wealth as the steam engine ever had been known before. The "industries" developed rapidly. Workers came from agriculture to work in "factories," making "goods" that might be exchanged for agricultural products or for other manufactured goods. The demand for labor increased and the volume of exchanges grew rapidly, the increasing variety and volume of products paying for each other. The improvements in agricultural methods referred to above enabled the workers remaining on the farms to produce as much of agricultural products as had been produced previously, hence the aggregate increase of all the products in trade was a gain to the social body. With this increase of production and distribution began the general rise of the standard of living for the workers, which has not ceased and need never cease so long as methods may be improved.

Printing is one of the industries in which great changes have been made within about fifty years. When the Mergenthaler type-casting machine appeared, the first of several competitors to the hand "compositors" who picked

up one type at a time, the latter thought that the printing trade was ruined for labor, but the effects of lowering the costs of printing, and of other inventions in lowering the costs of paper, were to enormously increase the volume of printing and the number of printers, with wage increases instead of wage reductions. Few families had a daily newspaper until printing was cheapened.

The general principle governing in all such cases is that although labor-saving methods may displace labor, all such changes release an amount of new purchasing power equal to the savings, and this purchasing power can be employed only by employing labor. Hence there is no reduction of employment in the aggregate, and all of such changes tend to improve living conditions.

Thus while we have shown in recent articles great economies in coal consumption, which may be considered as harmful to the coal industry, it also appears that the average price of electric current sold by the central power stations has been reduced 38 per cent since 1913, which increases the purchasing power of current consumers. The latter are buying more household appliances, which enlarges employment in the appliance industries. Moreover, economies in power production affect the industries generally, with like effects upon employment. If the economies in coal consumption afford as much employment in the other industries as is lost in the coal industry, the miners may find better employment than working underground. Anyway the case illustrates the usual effects of readjustments necessitated by improvements in industry. The principal effects are beneficial, and especially to the recipients of small incomes.

The Shorter Work-Week

In our last number we referred to the recent announcement of the League of Nations Labor Board, proposing a reduction of working time in all textile industries to 40 hours per week. The proposal is intended to make permanent the reduction from 48 hours or more that had been the rule in this country until 1933. After saying that if this was done in the textile industry, like action naturally will follow in the other industries, we added:

> Is it time to stop progress? Have we had enough of it? Must we in the future adopt the rule that all improvements in the methods of production shall be counteracted by reducing the hours of machine operations? Would the wage-workers of this country rather have more idle time or more of the products of the industries?

This comment has brought us numerous letters of protest. The writers say that the same opposition was offered to a reduction from 12 hours per day to 10 hours, and again from 10 hours to 8, which is no answer to the question addressed to the wage-workers. We do not undertake to say what the work-week should be, but we emphasize the fact that the standard of living depends upon production.

The reduction of the work-day from 12 hours to 10 and from 10 to 8, without lowering the standard of living, was accomplished by improvements in industrial methods, mainly by machinery, which makes labor more productive. It is probable that further reductions will be made in due time, but the burden of this article is that all the groups of the economic system, producing a vast variety of goods and services, are producing them *for each other and exchanging services!*

The "price" that each worker pays for each item in his cost of living is determined by the "cost" of it, hence each group's work-week and wage-rate figures in living costs and all around the circle. The proposals for the work-week for different groups run all the way down the scale to five days of 6 hours each. In agriculture, the work-week is 80 to 90 hours, and the farmers are selling their products to the rest of the population at approximately pre-war prices. This only illustrates the rule that governs all the relations of the economic system, to-wit, that the exchanges must be reciprocal in order to have prosperity.

The rate of factory production is determined by machine operations, and will anyone contend that the same machine can produce as many goods in 30 hours as in 35, 40 or 48, or that work-time can be reduced from 48 hours to 40 or 30 without increasing the cost of the product to consumers? If the question answers itself as we believe it does, our question is in order, *"would the wage-workers of this country rather have more idle time or more of the products of the industries?"* The emphasis is upon the fact, often overlooked, that in the final results the workers of the different industries are working for each other.

The theory that the hours of machine operations, or the capacity of machines, must be limited to avoid over-production, is a fallacy when applied to the industrial organization as a whole. There may be excessive production in certain lines, for the organization is trading within itself and must be kept in balance; but if the law of supply and demand is observed, there will be no general over-production until all groups of the population have all they want of everything. Until then, the question of the quoted paragraph above will remain pertinent. The question is for the workers themselves to answer.

Printed in U. S. A.